UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7,022,107 B1 APPLICATION NO. : 09/670735

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DATED

: 09/6/0/35 : April 4, 2006

INVENTOR(S)

: James Christensen et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title Page, showing an illustrative figure, should be deleted and substitute therefor the attached title page.

Replace Figure 1 with the corrected Figure 1 as attached.

Signed and Sealed this

Eighth Day of July, 2008

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) United States Patent Christensen et al.

(10) Patent No.: U

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(54) INFUSION PUMP WITH PRESSURE REGULATOR

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- (73) Assignee: Advanced Infusion, Inc., Tempe, AZ (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 09/670,735
- (22) Filed: Sep. 27, 2000

Related U.S. Application Data

- (63) Continuation-in-part of application No. 09/400,579, filed on Sep. 22, 1999.
- (51) Int. Cl. A61M 37/00 (2006.01)
- (52) U.S. Cl. 604/141; 604/891.1

See application file for complete search history.

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(57) ABSTRACT

An infusion pump for infusing drugs or other fluids into the body. The pump consists of two chambers. The storage chamber holds a large volume of drug at a variable and elevated pressure, which exceeds the preselected outflow pressure. The outflow chamber holds a smaller volume of drug at a constant outflow pressure. A moveable diaphragm attached to a valve controls the entry of the drug from the storage chamber into the outflow chamber. The pressure of the drug in the outflow chamber is determined by the forces applied to the diaphragm. The drug from the outflow chamber flows through a flow restrictor and catheter into the patient at a constant flow rate.

7 Claims, 3 Drawing Sheets



